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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,108	02/27/2004	Tatsuhiko Miyata	NIT-415	5068

7590 06/04/2007  
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EXAMINER
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WANG, HARRIS C

ART UNIT	PAPER NUMBER
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2139

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/787,108	Applicant(s) MIYATA ET AL.	
	Examiner Harris C. Wang	Art Unit 2139	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/06/2006, 3/07/2006</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. Claims 1-21 are pending

### ***Claim Objections***

- 2.

Claims 7 and 8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 7 recites the limitation "a request from the user to change the permission setting value for an arbitrary one of the levels." Claim 7 depends on Claim 6 which depends on Claim 4. Claim 4 recites the limitation "a request form the user to change the setting value for either of the permission levels other than said executabililty or open operation." Therefore Claim 7 does not recite every limitation upon the parent claim (Claim 4). Claim 8 is dependent on Claim 7 and is rejected under the same rationale.

### ***Claim Rejections - 35 USC § 112***

- 3.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 4 recites the limitation "A server according to Claim 4" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim. For the remainder of the Office Action the Examiner assumes Claim 4 depends on Claim 1.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9-11, 13 and 15-21 rejected under 35 U.S.C. 102(e) as being anticipated by Belani (6772350).

Regarding Claims 1 and 9,

Belani teaches a server (Figure 1, 20) comprising:

first means for categorizing permission setting values indicating whether object information items of various attribute of a registered user are disclosable to other persons or not depending on a level of the disclosability; (*"Fig. 3 depicts an exemplary access list information 50 for a resource...For each operation, a user or group may be granted "positive" permission or "negative" permission." Column 7, lines 5-14*). The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an

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item of an object information of each user is disclosable to an outsider" as "a permission"

(Paragraph [0070] of Applicant's Specification)

and second means for managing the permission setting values hierarchically.

*(Figure 6. shows the permissions arranged hierarchically by resource and Figure 7 shows permissions arrange hierarchically by user)* where the second means further imparting vertical relations thereto in accordance with types of the attribute information items and systematically categorizing the attribute information items. The Examiner interprets "vertical relations" as hierarchical relations.

Regarding Claim 10,

Belani teaches a server comprising: an interface for receiving transmitted information

*(Figure 2, User Interface Input Devices, 44); storage means (Figure 2, File Storage*

*Subsystem, 36); and means for reading information stored in the storage means*

*therefrom (Figure 2, Memory Subsystem, 34), wherein said storage means has an entry*

*table ("Fig. 3 depicts an exemplary access list information 50 for a resource "R" organized in a*

*table format" Column 7, lines 5-6) for storing object information items corresponding to*

*various attribute of a registered user and permission setting values ("Access list*

*information identifies the resource R in the first column. The second column identifies the users*

*or groups which are allowed to perform operations on resource "R". The third column 56*

*identifies the various operations that may be performed on resource "R" and permissions*

*associated with the operations for various users." Column 7, lines 6-13) indicating whether*

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said attribute information items are disclosable to other persons or not, said permission setting values being categorized in accordance with a level of the disclosability thereof.

The Examiner interprets the Access Control list as categorizing permissions of users.

The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

Regarding Claim 11,

Belani teaches a server according to claim 10, wherein said permission setting values are categorized into a plurality of levels having vertical relations thereamong and said entry table stores the setting value given to any of the plurality of levels.

*(Figures 6 and 7 show hierarchical relations in accordance to types of object information items and systematically categorizing object information items)*

The Examiner interprets "vertical relations" as hierarchical relations.

Regarding Claim 15,

Belani teaches a server according to claim 11, further comprising: an external storage device storing therein copy data of said entry table. *("access list information associated with the various resources may be stored in storage subsystem 32...File storage*

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*subsystem...may include...a floppy disk drive along with associated removable media, a...(CD-ROM)" Column 6, lines 7-9, 18-24)*

Regarding Claim 16,

Belani teaches a method for controlling a server, comprising the step of:  
categorizing permission setting values indicating whether object information items corresponding to various attribute of a registered user are disclosable to other persons or not into a plurality of levels; (*"Fig. 3 depicts an exemplary access list information 50 for a resource...For each operation, a user or group may be granted "positive" permission or "negative" permission." Column 7, lines 5-14*). The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

and hierarchically managing said object information items by imparting thereto vertical relations depending on a level of the disclosability. (*Figure 6. shows the permissions arranged hierarchically by resource and Figure 7 shows permissions arrange hierarchically by user*)

Regarding Claim 17,

Belani teaches a method according to claim 16, further comprising the steps of:

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receiving, from said registered user, a request to change the permission setting value for a specified one of the object information items; (*"The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource."* Column 2, lines 64-66)

determining a level of the permission setting value for which the change request has been made; judging whether there is contradiction between the permission setting value belonging to any level higher than the determined level and the permission setting value for which said change request has been made; (*"The access controller attempts to resolve permissions for the operations in the request based on access list information for the particular resource and user hierarchy information for the requesting user"* Column 2, lines 66-67, Column 3, lines 1-2)

and correcting, when there is contradiction, the permission setting value belonging to the level higher than said determined level. (*"If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted"* Column 3, lines 8-15)

Regarding Claim 18,

Belani teaches a method according to claim 16, wherein said object information items are managed by imparting vertical relations thereto in accordance with types of the object information items and categorizing the object information items. (*Figure 6.*



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*shows the permissions arranged hierarchically by resource and Figure 7 shows permissions arranged hierarchically by user)*

Regarding Claim 19,

Belani teaches a method according to claim 18 further comprising the steps of: receiving, from said registered user, a request to change the permission setting value for a specified one of the object information items; (*"The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource."* Column 2, lines 64-66)

determining a level to which the object information item belongs (*Figure 7, displays user hierarchy information*) The Examiner interprets object information item as a User's Identification; judging whether or not there is contradiction between the permission setting value for the object information item belonging to any level higher than the level of the object information item to which the permission setting value that has received the change request belongs and the permission setting value that has received the change request; (*"The access controller attempts to resolve permissions for the operations in the request based on access list information for the particular resource and user hierarchy information for the requesting user"* Column 2, lines 66-67, Column 3, lines 1-2)

and notifying, when there is contradiction, the user that the setting change request has been refused. (*Figure 8, Indicate that one or more operations in "O" could not be resolved for user "U" and resource "R", 94*)

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Regarding Claims 20 and 21,

Belani teaches a service providing system comprising:

a presence server for categorizing permission setting values indicating whether object information items of various attribute of a registered user are disclosable to other persons or not depending on a level of the permission and hierarchically managing the permission setting values; (*"Fig. 3 depicts an exemplary access list information 50 for a resource...For each operation, a user or group may be granted "positive" permission or "negative" permission." Column 7, lines 5-14*). The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

a service providing server for providing a service to a user; (*Figure 1, shows the Server, 20, interacting with a user 16*)

and a terminal with which the user receives the service provided by said service providing server, wherein said service providing server issues, to said presence server, (*"User systems 16 provide a mechanism for users or principals to generate requests requesting access to resources deployed in computer network " Column 5, lines 20-22*)

an access request for a specified one of the object information items of the user to which the service is to be provided, said presence server transmits to said service providing server (*"The request may be sent directly to the controlling server" Column 5, lines 27-28*), a portion of the object information item for which the access request has been issued which can be given within a range of the permission setting values, and the

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service providing server provides the service to the user based on the received portion of the object information item. (*"ACLR 22 on the controlling server receives the requests, and determines if the operations requested by the user can be performed on the requested resource" Column 5 lines 31-35*). The Examiner interprets the "portion of the object information item" as the User/Group ID, 54, in Figure 3.

Figure 2 displays the system performing the method of providing the service.

Regarding Claim 13,

Belani teaches a server according to claim 11, further comprising: means for extracting a request to change any of the permission setting values from received information; (*"The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource." Column 2, lines 64-66*)

and judging means for judging whether or not the permission setting value for which said change request has been made is contradictory to any of the permission setting values higher in rank than the setting value by referencing said entry table.

(*"The access controller attempts to resolve permissions for the operations in the request based on access list information" Column 2 lines 66-67, Column 3 lines 1-2*)

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-8, 12 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Baleni (6772350).

Regarding Claims 2 and 3,

Belani teaches a server according to claim 1. Belani also teaches "the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc." (Column 7, lines 3-5). The Examiner interprets "subscribe" as

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open. Belani further teaches a hierarchy based on resources as shown in Figure 6.

Belani further teaches detection means for detecting contradiction in a specified one of the permission setting values based on vertical relations (which the Examiner interprets as hierarchical relations) among the permission levels. (*"If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted for the user's ancestors in the access list information of the particular resource"* Column 3, lines 8-13). The Examiner interprets that resolving requested operations inherently requires detection means for detecting contradictions in hierarchical relations.

However Belani does not explicitly teach wherein said first means categorizes said permission setting values into exactly three respective levels, where executability of open operation is set as a permission level higher than said executability of read operation, and executability of read operation is set as a permission level higher than said executability of write operation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the server of Belani to have exactly three respective levels, where the open operation is a permission level higher than the read operation and the read operation is set a permission level higher than the write operation.

The motivation for the modification is that Belani already possesses the access control list that represent the three operations, as well as a resource hierarchy that has permission levels. One of ordinary skill in the art would be able to make the design

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choice of implementing a three level hierarchy with open a level higher than write and write a level higher than read.

Regarding Claim 4,

Belani teaches a server according to claim 1, wherein, said detection means checks, when there is a request from the user to change the setting value for either of the permission levels, for consistency of the permission setting value for each level higher than the level for which the change request has been made with the setting value for which the change request has been made. (*"The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource. The access controller attempts to resolve permissions for the operations in the request based on access list information...If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted"* Column 2, lines 64-67 and Column 3 lines 1, 8-12)

The Examiner interprets requesting a change in permission as requesting a permission that the user does not possess on the access control list.

While Belani does teach that "a negative permission may indicate that the user is specifically prohibited from performing the operation on the resource" Belani does not

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explicitly teach that the user may not request changing the setting value for permission levels on the said executability of open operation for any of the object information items.

It would have been obvious to one of ordinary skill in the art at the time of the rejection to choose a specific operation, such as the open operation, that the user may not request changing the setting value for permission levels.

The motivation is that Belani already possesses an access control list including negative permissions. Without any modification to the system and administrator or one of ordinary skill in the art could choose one operation that the user may not change by applying a negative permission on that resource.

Regarding Claim 5,

Belani teaches a server according to claim 4, wherein, said detection means corrects, when there is contradiction in said consistency, the permission setting value for each level higher than the level for which the request to change the setting value has been made. (*"if any of the second level ancestors have been granted specific positive or negative permissions for one or more unresolved operations, the permissions for those operations are inherited by user U1, and those operations are considered resolved."* (Column 12, lines 21-26)) The Examiner interprets the contradiction in consistency as the difference between the inherited permission values and the specific granted

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permissions. The Examiner further interprets the operations being resolved as the detection means correcting the inconsistency.

Regarding Claim 6,

Belani teaches a server according to claim 4, wherein said second means manages said object information items by imparting vertical relations thereto in accordance with types of the object information items and systematically categorizing the object information items. *(Figures 6 and 7 show hierarchical relations in accordance to types of object information items and systematically categorizing object information items)*

The Examiner interprets "vertical relations" as hierarchical relations.

Regarding Claim 7,

Belani teaches a server according to claim 6, wherein, said detection means checks, when there is a request from the user to change the permission setting value for an arbitrary one of the levels for any of the object information items, consistency of the permission setting value belonging to each of the object information items higher in rank than the object information item to which the setting value that has received the change request belongs with the setting value that has received the change request. *("The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource. The access controller attempts to resolve permissions for the operations in the request based on access list*



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*information...If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted" Column 2, lines 64-67 and Column 3 lines 1, 8-12)*

Regarding Claim 8,

Belani teaches a server according to claim 7, wherein, said detection means corrects, when there is contradiction in said consistency, the permission setting value belonging to any of the object information items higher in rank than the object information item to which the setting value that has received said change request belongs. *("if any of the second level ancestors have been granted specific positive or negative permissions for one or more unresolved operations, the permissions for those operations are inherited by user U1, and those operations are considered resolved."* (Column 12, lines 21-26)) The Examiner interprets the contradiction in consistency as the difference between the inherited permission values and the specific granted permissions. The Examiner further interprets the operations being resolved as the detection means correcting the inconsistency.

Regarding Claim 12,

Belani teaches a server according to claim 11. Belani also teaches "the operation which can be performed on a resource may include read, write, publish, subscribe,

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edit, delete, update, etc.” (Column 7, lines 3-5). The Examiner interprets “subscribe” as open.

Belani does not explicitly teach wherein said permission setting values are categorized into exactly three respective levels for determining whether an open operation, a read operation, and a write operation are executable with respect to any of the object information items, and said entry table stores the setting value given to any of said three levels.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the server of Belani to have exactly three respective levels, determining whether an open operation, a read operation and a write operation are executable..

The motivation for the modification is that Belani already possesses the access control list that represent the three operations. One of ordinary skill in the art would be able to make the design choice of implementing a three level hierarchy with these three resources.

Regarding Claim 14,

Belani teaches a server according to claim 12, further having: means for correcting, when there is contradiction between the setting value for which said change request has been made and any of the permission setting values higher in rank than

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the setting value, the higher rank permission setting value. (*"If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted"* Column 3, lines 8-15)

### **Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harris C. Wang whose telephone number is 5712701462. The examiner can normally be reached on M-F 8-5:30, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ R. SHEIKH can be reached on (571)272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HCW

  
TAGHI ARANI  
PRIMARY EXAMINER  
5/25/07